WHAT IS CLAIMED IS:

1. A method of manufacturing semiconductor devices, comprising:

oxidizing a first part of a metal film;

forming an inhibitor on a second part of said metal film;

rendering said first part, which is oxidized in said oxidizing, water-soluble, after said oxidizing and said forming; and

removing said inhibitor formed on said second part after said oxidizing and said forming,

wherein a strength of said rendering said first part of water-soluble is stronger than a strength of said oxidizing said first part.

2. A method of manufacturing semiconductor devices as defined in claim 1, wherein said metal film comprises copper, a copper alloy or a copper compound having copper as its principal component.

3. A method of manufacturing semiconductor devices as defined in claim 1, wherein said inhibitor is benzotriazole or one of its derivatives.

4. A method of manufacturing semiconductor devices as defined in claim 3, wherein concentration of benzotriazole or one of its derivatives is in a range of 0.001-1 wt %.

5. A method of manufacturing semiconductor devices as defined in claim 1, wherein said inhibitor on said second part of said metal film includes

a surfactant.

6. A method of manufacturing semiconductor devices as defined in claim 1, wherein a substance having hydrogen peroxide oxidizes said first part of metal film during said oxidizing.

7. A method of manufacturing semiconductor devices as defined in claim 1, wherein a substance having acid or its salt renders said first part, oxidized during said oxidizing, water-soluble during said rendering.

8. A method of manufacturing semiconductor devices as defined in claim 7, wherein said acid includes an organic acid.

9. A method of manufacturing semiconductor devices as defined in claim 8, wherein said organic acid includes at least one selected from the group consisting of citric acid, lactic acid, tartaric acid, phthalic acid and acetic acid.

10. A method of manufacturing semiconductor devices as defined in claim 1, wherein a substance having an ammonium compound renders said first part, which is oxidized in said first step, water-soluble during said rendering.

11. A method of manufacturing semiconductor devices as defined in claim 10, wherein said ammonium compound is ammonium hydroxide.

12. A method of manufacturing semiconductor devices as defined in claim 1, wherein said metal film comprises a first metal layer and a second metal layer, and the speed of rendering said first metal layer water-soluble is faster than the speed of rendering said second metal layer water-soluble.

13. A method of manufacturing semiconductor devices as defined in claim 12, wherein said first metal layer comprises copper, a copper alloy or a copper compound having copper as its principal component, and said second metal layer comprises titanium, a titanium alloy or a titanium compound having titanium as its principal component.